NEW SPECIES AND DISTRIBUTION RECORDS FOR LAS VILLAS PROVINCE, CUBA

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Several New species and significant extensions of known ranges of distribution were encountered in the course of general collecting and field work in southern Las Villas province of Cuba in the summer of 1951.

These are reported in this paper.

The authors, instructor and member of the class in Tropical Botany of Harvard University, wish to express their appreciation to the other members of the class for their assistance during this work. Duplicate specimens are to be distributed and will cite as collectors, R. A. Howard, W. Briggs, I. Lane, P. Kamb, and R. Ritland. The many services supplied by Dr. I. D. Clement, economic botanist in charge of the Atkins Garden and Research Laboratory which was our headquarters for this work, are gratefully acknowledged by the authors speaking for the entire group.

Dorstenia Lanei sp. nov.

Herba acaulis; rhizomatibus erectis, cylindricis, crassis, 13–18 mm. longis, 3–4 mm. crassis; stipulis 0.4–0.6 mm. longis, ad 0.2 mm. latis, anguste acuminatis, minute puberulentis. Folia peltata, purpureo-grisea, orbiculari-ovata, 18 × 15, 15 × 12 vel 9 × 8 mm., apice rotundata, basi saepe truncata, ad medium inserta, margine undulata vel crenulata, supra glabra sicco paullo scabrida, subtus puberulenta, petiolis glabris 4–7 cm. longis basi etiolatis glabrisque, apice purpureis puberulentisque. Inflorescentia cyathiformia; pedunculis 8–20 mm. longis, ad apicem puberulentis; receptaculo 4–5 mm. diametro, peltato, puberulente, purpureo-rubiginoso, margine 6–10 dentibus triangularibus horizontalibus inaequalibus, 0.4–0.8 mm. longis; floribus δ et φ intermixtis, floribus δ verdis, floribus φ albis.

CUBA: Las Villas Province: 10 kms. south of Santa Clara on the road to Manicaragua, *Howard*, *Briggs*, et al. 69 (TYPE, GH). Collected in flower July 5, 1951.

This is a unique species of *Dorstenia*, distinctive in its habit in the field and the first species known to us to occur on serpentine soil. The erect rhizome of *Dorstenia Lanei* is entirely buried so that the blade of the peltate leaf appears to be flat on the surface of the ground and the receptacle opens flush with the surface of the soil. The peduncle and petioles are all etiolated at the base and show pigmentation only at the immediate

Publication No. 13, Journal Series from the Atkins Garden and Research Laboratory of Harvard University Soledad, Cienfuegos, Cuba apices. The venation of the leaf blade is palmate from the point of attachment of the petiole. All the veins bifurcate once before reaching the margin. The midrib is not particularly distinct, appearing of the same size as the other veins and is not pinnately branched.

Dorstenia Lanei, named for Irwin Lane who discovered the first specimen in the field, is most nearly allied to D. erythrandra Wr. ex Griseb. but

differs in habit, size and leaf venation.

Erythrina Elenae sp. nov.

Arbor ad 10 m. alta; truncus 30 cm. diametro, spinis suberis, magnis, persistentibus; ramulis aculeatis, spinis 5–6 mm. longis. Folia pinnata, pinnis 3; petiolis inermibus, 6.5–11.5 cm. longis, glabris; petiolulis 2–3 mm. longis, 0.4–0.7 mm. crassis, fuliginosis, puberulentis vel glabris, rugosis; stipellis 0.5 mm. longis, fuliginosis, glandulosis; foliolis 3, inermibus, glabris; foliolis terminalibus lanceolatis vel lanceolato-ovatis, 3–13 cm. longis, 0.4–2.8 cm. latis, late acuminatis, basi rotundatis, infra medium latissimis, nervis lateralibus 8–20, nervis secondariis prominente reticulatis, margine integro; foliolis lateralibus similibus aliquando brevioribus. Flores non visi. Inflorescentia subterminalis, racemosa, lignosa, ad basin tumida, ad apicem attenuata, ad 13 cm. longa; pedicellis lignosis, 4–7 mm. longis, 1.5–2.5 mm. crassis. Legumina usque 2.5 cm. stipitata, 5–8 cm. longa, 7–8 mm. lata, moniliformia, fuliginosa, sublignosa, glabra, apice 1.8–2 cm. arcuato-rostrata. Semina 2–5, ovalia, 6–8 mm. longa, scarlatina.

CUBA: Las Villas Province: limestone hillside ¼ mile west of the spot where the Camino de la Sur crosses the Rio San Juan along the south slope of the Trinidad Mountains. *Howard*, *Briggs*, et al. 377 (TYPE, GH). Collected in fruit July 17, 1951.

The lanceolate to lanceolate-ovate glabrous leaflets of *Erythrina Elenae* set this species so distinctly apart from any other species reported from the Antilles that a satisfactory comparison is not possible with any of them. The specimens were collected in fruiting condition and until the flowers are known the species can not be assigned to any section in the genus.

Erythrina Elenae is respectfully named for Mrs. William Claffin, nee Helen Atkins, in appreciation of her active interest in the flora and the study of botany in Cuba.

Tetrazygia aurea sp. nov.

Frutex vel arbor parva, ad 5 m. alta. Folia anguste oblonga, lamina 4–5 cm. longa, 1–1.5 cm. lata, apice attenuata demum incurvata, in mucrone 0.4–0.5 mm. longo terminata, basi rotundata, supra nitida, glabra, subtus ferrugineo-stellata margine incurvata, nervis primariis 3, subtus prominentibus, supra prominenter impressis, nervis secundariis rectis angulis divergentibus. Inflorescentia terminalis, paniculata, floribus 5, raro 7; calyx undulatus; petala 5–6, 8–10 mm. longa, 5–6 mm. lata, rosea, obovata vel orbicularia, unguiculata; stamina 10–12, antheris 5 mm. longis, fila-

mentis 7 mm. longis; ovarium 5- vel 6-loculare, ovulis plurimis; stylis gracilibus, 11 mm. longis, ad apicem attenuatis, stigma punctiforme. Fructus depresso-globosus, 5- vel 6-locularis, 7-8 mm. diametro, pedicello 2 mm. longo (fructus pedicellusque persistente ferrugineo-stellatus); semina plurima, cuneiformia, 1 mm. longa, pars una adusta, pars altera castanea.

CUBA: Las Villas Province: Gaviñas, Trinidad Mountains, Howard 6447 (TYPE, GH); Las Vegas de Mataguá, Trinidad Mountains, Jack 5953; Buenos Aires, Trinidad Mountains, Leon, Jack & Rowe 13936, Smith, Hodgdon & Gonzales 3383; El Purial on Rio Banao, Lomas de Banao, Ekman 16236.

The cited collections have all been named *Tetrazygia elaeagnoides*, a species which differs from *T. aurea* in having a cinereous pubescence, glabrate fruits, dull and acuminate leaves, 4-parted flowers and a strongly 4-lobed fruit. The specific epithet is derived from the golden color of the leaves.

Pectis Ritlandii sp. nov.

Herba prostrata. Folia oblongo-linearis, 5–8 mm. longa, 1–2 mm. lata, apice acuta et spinulosa, margine 3–4 paribus setarum, praecipue basin versum, non ad apicem, glandulosa, glandulis submarginalibus, uniseriatis, 4–9 per marginem. Capitula solitaria, terminalis; pedunculis 5–11 mm. longis, glabris; involucro campanulato, 4–5 mm. longo; phyllaribus 5, lineari-obovatis, acutis vel obtusis, basi gibbosis, carinatis, dorso glandulosis, glandulis oblongis irregulariter dispositis, margine scariosis hyalinis; floribus ligulatis 5, ligulis luteis, ad 5 mm. longis; floribus discoideis 4–8, corollis ad 3.5 mm. longis; pappi setis numerosis, inaequalibus, maturitate ad 2 mm. longis, scabris, pilulis minute excurrentibus.

CUBA: Las Villas Province: on coastal rocks between Punta Lobas and Pasa Caballos, Howard, Briggs, et al. 357 (TYPE, GH); Castillo de Jagua, Howard 4219.

Pectis Ritlandii is named in honor of Richard Ritland who collected the first specimens. The species is most closely related to Pectis Leonis Rydb. which is known only from savannahs north of the Sancti Spiritus mountains. Pectis Leonis differs from the present species in having the stem and branches rough pubescent; the glands in the leaves about 16 in number, and the margins of the phyllaries purplish.

Xylosma Shaferi (Wils.) comb. nov.

Myroxylon Shaferi P. Wilson, Torreya 30: 73. 1930.

Tillandsia argentea Griseb.

CUBA: Las Villas Province: forest on hillslope west of Rio San Juan crossing on the southern slopes of the Trinidad mountains, Howard, Briggs, et al. 367.

This small silvery *Tillandsia* was described by Grisebach on a Wright specimen collected at Monteverde in Oriente province. It has since been reported from Jamaica in the Greater Antilles. The current collection is the first record of its occurrence in Las Villas province.

Cattleyopsis Lindenii (Lindl.) Cogn.

CUBA: Las Villas Province: thorn shrub on the Camino de la Costa, west of Juraguá, Howard, Briggs, et al. 245.

This species has a wide distribution in Cuba, the adjacent Bahama Islands, and Jamaica but has not been reported previously from Las Villas.

Tetramicra erosa Carabia

CUBA: Las Villas Province: dry hillside 10 kms. south of Santa Clara on serpentine soil, Howard, Briggs, et al. 293.

Previously known from the Oriente province of Cuba this is the first record of the species from Las Villas.

Croton prostratus Urban

CUBA: Las Villas Province: dry hillside 10 kms. south of Santa Clara on serpentine soil, Howard, Briggs et al. 78.

The type collection and a single additional collection of this species were made by Ekman on Sierra de Nipe in Oriente province. The current collection was made from a few plants growing in association with *Croton nummularifolius* in an open savannah.

Leucocroton revolutus Wright

CUBA: Las Villas Province: dry hillside 10 kms. south of Santa Clara on serpentine soil, Howard, Briggs et al. 107.

The type collection of this species was made in Pinar del Rio province. It is also known from the Oriente province. This collection represents the first material from central Cuba.

Linociera bumelioides Griseb.

CUBA: Las Villas Province: thorn shrub along the Camino de la Costa south of Juraguá, Howard, Briggs et al. 238.

A widely distributed species not previously recorded from Las Villas province.

Heliotropium hypogaea Urb. and Ekman

CUBA: Las Villas Province: Camino de la Costa west of Juraguá, Howard, Briggs et al. 226.

Heliotropium hypogaea was described by Urban and Ekman based on material collected on Gonave Island off Hispaniola. The collection cited

above is the first record of this interesting plant from Cuba. A small colony of this species was found growing on sandy soil in a thorn shrub thicket. The plants were in flower on July 11, 1951, and the corollas were white with yellow throats. Mature fruits had elongated peduncles and were pushed into the ground as described by Urban and Ekman. The species is distinctive in the genus *Heliotropium* in having these hypogeous fruits.

Tecoma microphylla (Lam.) Urban

CUBA: Las Villas Province: thorn shrub along the Camino de la Costa, south of Juraguá, Howard, Briggs et al. 256.

Like the preceding species *Tecoma microphylla* has been found only on Gonave Island off Hispaniola. This is the first record for this handsome shrub in Cuba.

Guettarda rigida A. Rich.

CUBA: Las Villas Province: dry hillside 10 kms. south of Santa Clara on serpentine soil, Howard, Briggs et al. 73.

This species has been collected previously in Matanzas province and the current collection represents the first record from Las Villas.

Machaonia microphylla Griseb.

CUBA: Las Villas Province: forested hillslope west of the Rio San Juan crossing on the southern slopes of the Trinidad mountains. *Howard*, *Briggs et al. 397*; San Blas — Buenos Aires area, *Howard 6537*.

This handsome 15 foot shrub has attractive white flowers with a strong and pleasant odor. The plants were extremely attractive to bees and might well be cultivated as ornamentals or honey plants. The collection made by the Tropical Botany class will be distributed as an Exsiccata of the Gray Herbarium. The two collections cited above are the first records of this species from Las Villas province.

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